

# PATENT ABSTRACTS OF JAPAN

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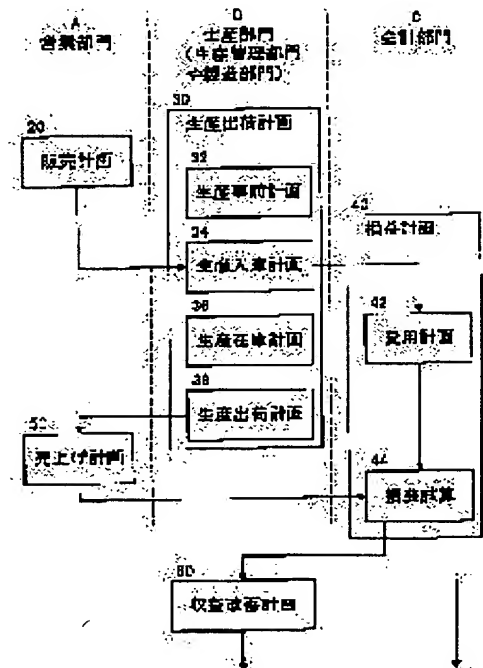
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## (54) ESTIMATING METHOD FOR PROFIT PLAN

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To easily check the improvement plan of increasing profit by predicting sales quantity, determining a producing means, predicting the product cost required for sales, predicting the sales, predicting the profit provided from the difference between product cost and the sales and checking the improvement plan for increasing the profit covering producing and vending.

**SOLUTION:** A profit/loss predicting function is composed of a sales plan 20 due to a business section A, sales plan 50, production shipping plan 30 due to a production section B, and profit plan 40 due to an account section C. Besides, after the profit is scheduled by such a profit/loss predicting function, a profit improving function is executed by a profit improvement plan 60. Thus, both the profit/loss predicting function and the profit improving function can be provided. Therefore, in addition to the prediction of profit provided by the producing and vending of product in spite of increase of product classification division or complication of route from producing to vending, the improvement for increasing the profit can be more easily checked as well.



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**CLAIMS**

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[Claim(s)]

[Claim 1] In the decision approach of profit planning for planning the profits from manufacture of a product to sale Based on economic trends or a market factor, predict the distribution cost of a product, and the means of production of a product is determined based on this distribution cost. Based on said distribution cost and said determined means of production, the necessary product costs required by sale of a product are predicted. The selling price of a product is assumed and sales are predicted. From the difference of said necessary product costs and said sales Once predicting the profits obtained by selling the manufactured product and predicting these profits The decision approach of profit planning characterized by performing improvement examination for expanding said profits until it results [ from manufacture ] in sale based on the prediction and decision which were made by the time it asked for these profits.

[Claim 2] The decision approach of profit planning characterized by making the prediction and decision which will be made in the decision approach of said profit planning by the time it asks for said profits by the rougher product category compared with said improvement examination performed after asking for these profits.

[Claim 3] The decision approach of profit planning characterized by performing said improvement examination which said product is a product partition like a continuation rolling strip, and is performed in claim 1 after being made to make the prediction and decision which will be made by the time it asks for said profits by this product partition unit or the product category beyond it and asking for these profits on the other hand by the finer product category of a customer unit.

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**DETAILED DESCRIPTION**

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] The decision approach of profit planning for planning the profits from manufacture of a product to sale is started, and, in addition to prediction of the profits especially obtained from an increment and manufacture of a product category by manufacture and sale of a product irrespective of complication of the path to sale, it is related with the decision approach of profit planning that improvement examination for expanding these profits can also be performed more easily.

[0002]

[Description of the Prior Art] The general way of forming profit planning is performed by the following approaches ( Nikkei library written by "how to form profit planning" \*\*\*\* Hideki).

[0003] The ordinary profit frame made into an A1. target is determined.

An A2. fixed cost is examined and determined and a marginal balance is decided.

A gross margin frame is decided by deciding A3. selling variable costs.

A4. -- a set determines the sales and the gross margin rate which can realize this gross margin frame.

A5. cost of goods sold is computed as a frame, and based on this, an inventory, the amount of purchase, etc. are considered and it goes.

If A6., thus a big framework are decided, a costs plan is considered according to an item and summarized with the figure of a detail.

It collects into the A7. last target at the form of a condensed profit and loss statement.

[0004] However, it is difficult for the form pro mix (merchandise category mix) of sales or sale to decide upon the sales plan under which a target gross margin frame is realizable, in the industry decided mainly by economic trends or the market factor. Therefore, after deciding upon the selling plan first and deciding upon a sales plan, production planning, the inventory plan, and the costs plan based on this based on economic activity level prediction, profit and loss were calculated as the result, and it came as profit planning. A procedure is shown below.

[0005] Based on B1. activity level prediction, prediction of the distribution cost according to form is issued (selling plan).

It examines how it is produced to the sales forecast according to B-2. form (production planning).

At last, from an inventory and production planning, although shipped during what [ in stock / what / end of this term ], and this term, an amount is predicted in the first half of B3. (an inventory plan and shipping planning).

A price is given to that of which B4. shipment is done, and sales are predicted (sales plan).

The costs which it takes are calculated based on B5. production planning (costs plan).

Profits are calculated at B6. sales-costs.

[0006]

[Problem(s) to be Solved by the Invention] Generally desired profit is defined and the sales target is decided based on it like above A1-A6. On the other hand, in profit planning of the big business in the industry it is decided mainly by economic trends or the market factor that the form pro mix of sales or sale will be, it is a chief aim like above B1 - B6 to predict the level of a profit-and-loss frame. That is, it is the approach of there being two kinds of types of profit planning, and examining which

grades sales and costs being one side realizing desired profit. Moreover, another side is the approach of predicting which grade sales are predicted and profits become with as sufficient a precision as possible.

[0007] The viewpoint how profit planning in a steel company etc. should occur in order to realize the function which is the latter type conventionally and the former has, i.e., desired profit, was missing. If the form pro mix of sales or sale is decided [ but ] mainly by economic trends or the market factor at all, carrying out a deer even if it is going to make it the former approach completely, decision of the sales plan on condition of target income realization is difficult.

[0008] so , in order to realize desired profit in companies , such as a steel company which improve the fault point of profit planning of two kinds of conventional types , and predict the level of a profit and loss frame based on the above-mentioned point , it be important to offer the decision approach of new profit planning of having also have the viewpoint how should be carry out or how should have been carried out for improve profits although it do not result in a target .

[0009] It was made so that this invention may solve said conventional trouble, and it aims at offering the calculation approach of profit planning that improvement examination for expanding these profits can also be performed more easily in addition to prediction of the profits obtained from an increment and manufacture of a product category by manufacture and sale of a product irrespective of complication of the path to sale.

[0010]

[Means for Solving the Problem] In the decision approach of profit planning for this invention to plan the profits from manufacture of a product to sale Based on economic trends or a market factor, predict the distribution cost of a product, and the means of production of a product is determined based on this distribution cost. Based on said distribution cost and said determined means of production, the necessary product costs required by sale of a product are predicted. The selling price of a product is assumed and sales are predicted. From the difference of said necessary product costs and said sales Once predicting the profits obtained by selling the manufactured product and predicting these profits Said technical problem is solved by having been made to perform improvement examination for expanding said profits until it results [ from manufacture ] in sale based on the prediction and decision which were made by the time it asked for these profits.

[0011] Moreover, while solving said technical problem by having been made to make the prediction and decision which will be made by the time it asks for said profits by the rougher product category compared with said improvement examination performed after asking for these profits, profits prediction is performed more easily and it enables it to carry out to coincidence more concretely about said improvement examination in the decision approach of said profit planning.

[0012] Moreover, said product is a product partition like a continuation rolling strip, and while solving said technical problem by having been made to perform said improvement examination which is made to make the prediction and decision which will be made by the time it asks for said profits by this product partition unit or the product category beyond it, and is performed on the other hand after asking for these profits by the finer product category of a customer unit, it enables it to realize concretely in a steel company.

[0013] Hereafter, an operation of this invention is explained briefly.

[0014] If profit planning is considered based on profit planning of two kinds of above-mentioned types, it can be divided into the following two functions. The function of prediction for one to predict sales and to predict a profit-and-loss frame further (profit-and-loss prediction function). It is the function (profit improvement function) to examine how there should be any sale for it by considering that another improves a profit for target income realization.

[0015] If it is going to give these two functions once to coincidence by profit planning, while hitting profit and loss and predicting the sales which seem to be utterly the highest as for a probability, formulation of a plan is very difficult by to which priority is given by saying that it decides upon the plan containing the efforts cost for satisfying desired profit. Moreover, another function is lost in performing only one of functions.

[0016] Therefore, in this invention, the following approaches are proposed according to the function of profit planning cut and divided into two.

[0017] The activity which predicts a profit-and-loss frame first is done efficiently. This sets weight

to hit profit and loss, and performs it. This activity is done mainly mainly by a staff department. In this case, in a fine mesh (product category), it is desirable that it is made not to carry out planned creation. For example, it does not ask for the whole which totaled prediction of a customer unit by place \*\* which carries out a sales forecast, either, but as it said that it predicted, the thing which is the whole sales article kind from a viewpoint of a macro, such as a trend of need industry, and to predict in a rougher mesh is desirable. For example, in the operation gestalt mentioned later, it predicts in a rougher mesh [ say / a continuation rolling strip ] (product category).

[0018] Next, based on the result of the profit-and-loss prediction, the profit improvement a sales side and in costs is considered. For example, if the result of profit-and-loss prediction can already be satisfied, it will consider how the sales which have become the requisite for profit-and-loss prediction, and costs are saved, and will consider what if it cannot be satisfied, in order to bring close, it carries out in each part division of Rhine. It is desirable to perform examination [ say / how this improves the contents of selling per customer ] which contained the action plan (improvement for expanding profits) by the fine mesh (product category) more. For example, he is trying for a fine mesh to examine from that of a customer unit with the operation gestalt mentioned later.

[0019] If the plan of a profit improvement can be performed, the amount of a profit improvement by it will be grasped. This is grasped as the increment over the first profit-and-loss prediction, i.e., the difference.

[0020] Profit-and-loss management of the whole company adopts the profit and loss based on the first profit-and-loss prediction as profit planning. This serves as MONOSASHI of the whole company. However, the target of each Rhine is the plan of a profit improvement, and it is called for that each Rhine clears this. And even if less than a target, even when it is the worst, the plan of profit-and-loss prediction performs employment that it must be cleared (minimum norm).

[0021] Thus, according to this invention, in addition to prediction of the profits obtained by manufacture and sale of a product, improvement examination for expanding these profits can also be more easily performed irrespective of complication of the path from an increment and manufacture of a product category to sale.

[0022] Therefore, since a profit-and-loss prediction activity is done with a feeling of the whole [ a staff department hitting profit and loss objective ] according to this invention, it can decide upon a more accurate plan more for a short period of time. Moreover, since the Rhine section works on a remedy from a micro viewpoint and performs a target setup after being based on prediction of such profit and loss as a norm, planned [ for effectiveness to go up more ] decision and activation which did not stop at mere prediction but included the intention and target of an improvement can be urged.

[0023]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained to a detail using drawing.

[0024] Drawing 1 is the diagram showing the flow of processing of the decision approach of profit planning of an operation gestalt that this invention was applied.

[0025] The product of the object of this operation gestalt with which the decision approach of profit planning of this operation gestalt is performing manufacture and sale for the steel company which performs from production to sale serves as a coil of a continuation rolling strip. Such a product is shipped to various types of industry, such as an automaker and an electrical equipment manufacturer. In addition, the decision approach of profit planning of this operation gestalt is made per half year for six months.

[0026] As shown in this drawing 1 , in the operating section A, the selling plan 20 and the sales plan 50 are performed, production shipping planning 30 is performed in the production section B, and, as for the decision approach of profit planning of this operation gestalt, the profit plan 40 is performed in the accounting section C. Moreover, although the profit improvement plan 60 is made mainly in the production section B, it is not limited to this, and it is made also in the operating section A and the accounting section C if needed.

[0027] Moreover, the above-mentioned production shipping planning 30 consists of the production prior plan 32, a production warehousing plan 34, a production inventory plan 36, and production shipping planning 38 in detail. Moreover, the profit plan 40 consists of a costs plan 42 and profit-

and-loss trial calculation 44. Moreover, in addition to the manufacturing department which produces to the actual condition of works etc., the production section B contains a production-control section.

[0028] By the decision approach of profit planning of this operation gestalt, first, the selling plan 20 is made in the operating section A, and, on the other hand, the production prior plan 32 of the production shipping planning 30 is made in the production section B if needed in parallel to this.

[0029] The selling plan 20 is first made by predicting the distribution cost of a product based on economic trends or a market factor. Although the product which this operation gestalt deals with is a continuation rolling strip, this distribution cost is determined based on the market condition of that delivery place, for example, an automaker, an electrical equipment manufacturer, etc. Moreover, this distribution cost prediction is made to be performed in the comparatively rough mesh (product category) of the unit of a continuation rolling strip. Here, although collecting the information from an actual product delivery place, and performing such a distribution cost is also considered, the problem of requiring a big effort and time amount is in information gathering in this case.

[0030] It says that the above-mentioned production prior plan 32, on the other hand, grasps the production capacity of the means of production with which the production section B is equipped, and the trial calculation of the producible amount according [ for example, ] to a continuous mill is made. Moreover, in this production prior plan 32, how manufacture of the product which received the order is distributed to works or each manufacture machine, and preparing the preliminary information for determining are also made.

[0031] Next, in the production section B, the means of production of a throat, for example, with which continuous mill it manufactures and means of production, is further distributed [ whether each product is produced at which works and ] at each works by the production warehousing plan 34 of the production shipping planning 30 based on the distribution cost of each product required in the selling plan 20. Allocation of such means of production is made also using the information acquired in the above-mentioned production prior plan 32. It is verified that the product of the distribution cost predicted in the selling plan 20 is producible in the production section B with this production warehousing plan 34, and it is outline constant \*\*\*\* also like the manufacture line of each product.

[0032] Here, the produced product is not necessarily shipped immediately and taking over cannot necessarily get it from a delivery place immediately. For this reason, in the production inventory plan 36, the produced product or the inventory of the product in the production section B is planned. [ how ] Moreover, in the production shipping planning 38, the plan of how the product [ in stock / product / is produced and ] is shipped is made. In this production shipping planning 38, it is made that it mainly being determined by the situation of a delivery place and predicting as a production side based on the past experience predicts a difficult shipment stage.

[0033] If assignment of the means of production of the product which is due to be sold at this term in the production warehousing plan 34 on the other hand as mentioned above is made, the necessary product costs required by sale of a product in the costs plan 42 focusing on the costs which production of a product takes next will be predicted. The charge costs of the rolling mill used for these necessary product costs producing that product, the costs of various articles of consumption which production of that product took, etc. are contained. This costs plan 42 is made in the accounting section C.

[0034] Moreover, if the shipping planning of the product produced in the production shipping planning 30 is made, in the operating section A, it will sell continuously, and a plan 50 will be made. In this sales plan 50, it asks for the sales price of the product which was predicted by the production shipping planning 38 and which is shipped based on the prices at the time of an order received of each product (product unit price etc.). Moreover, the sales for every month are predicted from such a sales price. Also in a product with the shipment stage same similarly, when order-received stages differ, order-received prices differ and the sales prices at the time of shipment also differ. He is trying to also take into consideration the order-received price which changes with such order-received stages in this sales plan 50.

[0035] If the necessary product costs required by sale of a product in the costs plan 42 are predicted and sales are predicted in the sales plan 50, the profit-and-loss trial calculation 44 will predict the profits obtained by selling the produced product. These profits serve as a frame which deducted the necessary product costs required in the costs plan 42 from the sales required in the sales plan 50

fundamentally. The profits prediction obtained by this profit-and-loss trial calculation 44 brings a decision result of the decision approach of profit planning of this operation gestalt. Furthermore, with this operation gestalt, improvement examination of business until it results [ from manufacture ] in sale in the profit improvement plan 60 is performed based on the profits prediction obtained by this profit-and-loss trial calculation 44, i.e., a decision result. In this profit improvement plan 60, in order to expand further the profits predicted in this way, the examination for finding out the improving point which is mainly concerned with the production section B, and should be made in the operating section A and the accounting section C if needed is made.

[0036] According to this operation gestalt, a profit-and-loss prediction function is realizable first with the selling plan 20 by the operating section A and the sales plan 50, the production shipping planning 30 by the production section B, and the profit plan 40 by the accounting section C as explained above. Moreover, after such a profit-and-loss prediction function performs profit planning, the profit improvement plan 60 is performing the profit improvement function. Therefore, according to this operation gestalt, it is possible to realize both these profit-and-loss prediction functions and a profit improvement function.

[0037] Therefore, according to this operation gestalt, the outstanding effectiveness that improvement examination for expanding these profits can also be performed more easily in addition to prediction of the profits obtained by manufacture and sale of a product can be acquired irrespective of complication of the path from an increment and manufacture of a product category to sale.

[0038] With the \*\*\*\* operation gestalt, in the profit-and-loss prediction function, profit planning is performed in a rougher mesh and profit planning is specifically performed rather than the continuation rolling strip at the rough product category. Therefore, such profit planning can be performed efficiently. About the profit improvement function which continues in this operation gestalt and is made in the profit improvement plan 60, an improvement plan is made more by the fine mesh, and an improvement plan is made by the finer product category of the customer unit which specifically supplies a product. Therefore, it is possible to examine more concretely the contents of an improvement which should be performed in each section.

[0039] Therefore, since a profit-and-loss prediction activity is done with a feeling of the whole [ a operating staff department hitting profit and loss objective (it predicting) ] according to this operation gestalt, it can decide upon a more accurate plan more for a short period of time. Moreover, since the Rhine section works on a remedy from a micro viewpoint and performs a target setup after being based on prediction of such profit and loss as a norm, it cannot stop at mere prediction but the intention and target of an improvement can be urged to \*\*\*\*\*, planned [ for effectiveness to go up more ] decision, and activation. Moreover, if the plan of a profit improvement is attained as profit-and-loss management of the whole company as planned since it is based on prediction of profit and loss, the profit and loss more than the predicted profit and loss are realizable.

[0040]

[Effect of the Invention] According to this invention, the outstanding effectiveness that improvement examination for expanding these profits can also be performed more easily in addition to prediction of the profits obtained by manufacture and sale of a product can be acquired irrespective of complication of the path from an increment and manufacture of a product category to sale as explained above.

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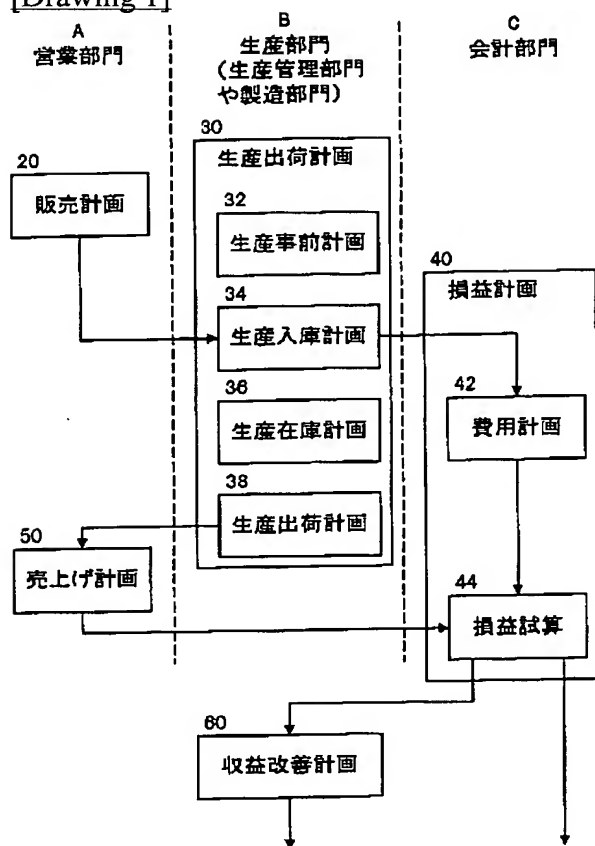
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## DRAWINGS

[Drawing 1]



[Translation done.]

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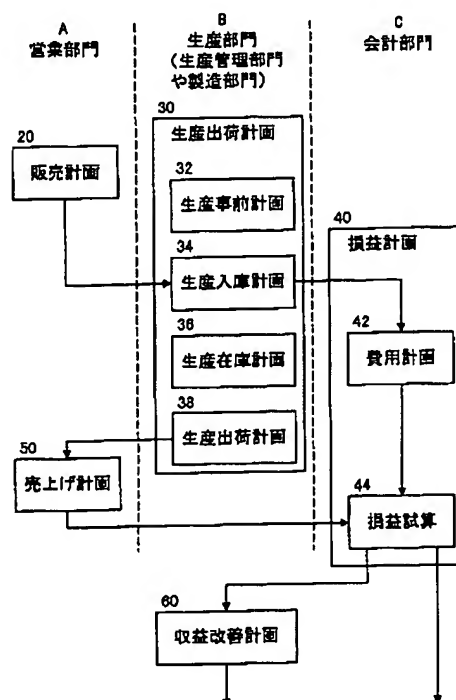
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(54) 【発明の名称】 利益計画の策定方法

(57) 【要約】

【課題】 製品分類区分の増加や製造から販売までの経路の複雑化に拘わらず、製品の製造及び販売により得られる利益の予測に加え、該利益を拡大するための改善検討をも、より容易に行えるようにする。

【解決手段】 損益予測機能として、営業部門Aにおいて販売計画20及び売上げ計画50を、生産部門Bにおいて生産出荷計画30を、会計部門Cにおいて収益計画40を行い、利益計画を行う。この後、収益改善機能として収益改善計画60を行う。これら損益予測機能及び収益改善機能が分離され順次行われることで効果的になされる。



## 【特許請求の範囲】

【請求項1】製品の製造から販売までの利益を計画するための利益計画の策定方法において、景気動向や市況要因に基づいて製品の販売量を予測し、該販売量に基づき製品の生産手段を決定し、前記販売量及び決定された前記生産手段に基づき、製品の販売までに要する所要製品費用を予測し、製品の販売価格を仮定して売上高を予測し、前記所要製品費用及び前記売上高の差から、製造した製品を販売することによって得られる利益を予測し、一旦該利益を予測した後に、該利益を求めるまでに行った予測及び決定に基づき、製造から販売に至るまでの間での前記利益を拡大するための改善検討を行うようにしたことを特徴とする利益計画の策定方法。

【請求項2】前記利益計画の策定方法において、前記利益を求めるまでに行う予測及び決定を、該利益を求めた後に行う前記改善検討に比べて、より大まかな製品分類区分で行うようにしたことを特徴とする利益計画の策定方法。

【請求項3】請求項1において、前記製品が連続圧延帯板のような製品区分であり、前記利益を求めるまでに行う予測及び決定を該製品区分単位乃至はそれ以上の製品分類区分で行うようにし、一方、該利益を求めた後に行う前記改善検討を顧客単位のより細かな製品分類区分で行うようにしたことを特徴とする利益計画の策定方法。

## 【発明の詳細な説明】

## 【0001】

【発明の属する技術分野】製品の製造から販売までの利益を計画するための利益計画の策定方法に係り、特に、製品分類区分の増加や製造から販売までの経路の複雑化に拘わらず、製品の製造及び販売により得られる利益の予測に加え、該利益を拡大するための改善検討をも、より容易に行うことができる利益計画の策定方法に関する。

## 【0002】

【従来の技術】一般的な利益計画の立て方は、以下のような方法で行われる（『利益計画の立て方』宇角英樹著 日経文庫）。

- 【0003】A1. 目標とする経常利益額を決定する。  
A2. 固定費を検討して決定し、限界利益を決める。  
A3. 販売変動費を決めることにより、粗利益額を確定する。  
A4. この粗利益額を実現できる売上高と粗利益率をセットで決定する。  
A5. 売上原価を枠として算出し、これを基にして在庫や仕入れ額などを考えて行く。  
A6. このようにして大きな枠組みが決まったら、費用計画を項目別に検討するなどして、詳細の数字にまとめていく。  
A7. 最終的に、総合損益計算書の形にまとめる。

【0004】しかし、売上高や販売の品種プロミックス（品種構成）が、主として景気動向や市況要因によって決まる産業では、目標の粗利益額を実現できる売上計画を策定することは困難である。従って、経済の活動水準予測を基に、まず販売計画を策定し、これを基にして売上計画・生産計画・在庫計画・費用計画を策定した上で、その結果として損益を算定して利益計画としてきた。手順を以下に示す。

【0005】B1. 活動水準予測を基に、品種別の販売量の予測を出す（販売計画）。

B2. 品種別の販売予測に対し、それをどう生産するかを検討する（生産計画）。

B3. 前期末在庫と生産計画から、当期末に在庫されるものと当期中に出荷されるものの量を予測する（在庫計画・出荷計画）。

B4. 出荷されるものに価格を付与し、売上高の予測を行う（売上計画）。

B5. 生産計画をもとに、それに要する費用を算定する（費用計画）。

B6. 売上高－費用で利益の計算をする。

## 【0006】

【発明が解決しようとする課題】上記のA1～A6のように、一般的には目標利益を定めて、それを基に売上目標を決めていく。一方、売上高や販売の品種プロミックスが主として景気動向や市況要因によって決まる産業における大企業の利益計画では、上記のB1～B6のように、損益額の水準を予測することが主眼となっている。即ち利益計画には2通りのタイプがあり、一方は目標利益を実現するには売上や費用はどの位であるべきかを検討する方法である。又、もう一方は売上を予測して利益がどの位になるかをできるだけ精度よく予測する方法である。

【0007】製鉄会社等での利益計画は、従来後者のタイプであり、前者の持つ機能、即ち目標利益を実現するためにはどうあるべきか、という観点に欠けていた。しかしながら、かといって完全に前者の方法にしようとしても、売上高や販売の品種プロミックスが主として景気動向や市況要因によって決まってしまう以上、目標利益実現を前提にした売上計画の策定は困難である。

【0008】そこで上述の点を踏まえ、従来の2通りのタイプの利益計画の不具合点を改良し、損益額の水準の予測を行っている製鉄会社等の企業において、目標利益を実現するためにはどうすべきか、あるいは目標には至らないにしても少しでも利益を改善するにはどうすべきかという観点も併せ持った新しい利益計画の策定方法を提供することは重要である。

【0009】本発明は前記従来の問題点を解決するべくなされたもので、製品分類区分の増加や製造から販売までの経路の複雑化に拘わらず、製品の製造及び販売により得られる利益の予測に加え、該利益を拡大するための

改善検討をも、より容易に行うことができる利益計画の算定方法を提供することを目的とする。

#### 【0010】

【課題を解決するための手段】本発明は、製品の製造から販売までの利益を計画するための利益計画の策定方法において、景気動向や市況要因に基づいて製品の販売量を予測し、該販売量に基づき製品の生産手段を決定し、前記販売量及び決定された前記生産手段に基づき、製品の販売までに要する所要製品費用を予測し、製品の販売価格を仮定して売上高を予測し、前記所要製品費用及び前記売上高の差から、製造した製品を販売することによって得られる利益を予測し、一旦該利益を予測した後、該利益を求めるまでに行った予測及び決定に基づき、製造から販売に至るまでの間での前記利益を拡大するための改善検討を行うようにしたことにより前記課題を解決したものである。

【0011】又、前記利益計画の策定方法において、前記利益を求めるまでに行う予測及び決定を、該利益を求めた後に行う前記改善検討に比べて、より大まかな製品分類区分で行うようにしたことにより前記課題を解決するとともに、利益予測をより容易に行い、同時に前記改善検討についてはより具体的に行えるようにしたものである。

【0012】又、前記製品が連続圧延帯板のような製品区分であり、前記利益を求めるまでに行う予測及び決定を該製品区分単位乃至はそれ以上の製品分類区分で行うようにし、一方、該利益を求めた後に行う前記改善検討を顧客単位のより細かな製品分類区分で行うようにしたことにより前記課題を解決するとともに、製鉄会社で具体的に実現できるようにしたものである。

【0013】以下、本発明の作用について簡単に説明する。

【0014】利益計画は、前述の2通りのタイプの利益計画を基に考えると、次の2つの機能に分けることができる。1つは売上高を予測し更に損益額を予測するという、予測の機能（損益予測機能）。もう1つは目標利益実現のために収益を改善することを考え、そのための販売はどうあるべきかを検討する機能（収益改善機能）である。

【0015】この2つの機能を同時に一度の利益計画でやろうとすると、損益をあてようとして最も確率の高そうな売上の予測をする一方で、目標利益を満足させるための努力代を含んだ計画を策定するということになり、どちらを優先するかということで極めて計画の作成が難しい。またどちらか一方の機能のみを行うのでは、もう一方の機能が失われる。

【0016】従って、本発明では2つに切り分けた利益計画の機能に応じて、次のような方法を提案する。

【0017】まず損益額を予測する作業を効率的に行う。これは損益をあてるということに重きをおいて行

う。この作業は主としてスタッフ部門を中心に行う。この際には、細かいメッシュ（製品分類区分）では計画作成をしないようにすることが好ましい。例えば販売予測をする場合でも、顧客単位の予測を集計した全体を求めるのではなく、需要産業の動向等、マクロの観点から販売品種全体の予測するといったように、より大まかなメッシュで予測を行うことが好ましい。例えば後述する実施形態では連続圧延帯板という、より大まかなメッシュ（製品分類区分）で予測している。

【0018】次にその損益予測の結果に基づいて、売上面や費用面での収益改善を検討する。例えば損益予測の結果がすでに満足できるものであるなら、損益予測の前提となった売上や費用をいかにキープするかを考え、もし満足できるものでなければ少しでも近づけるためにはどうするか、ということラインの各部課で考える。これは顧客単位に販売内容をどう改善するかといった、より細かいメッシュ（製品分類区分）でアクションプラン（利益を拡大するための改善）を含んだ検討を行うことが好ましい。例えば後述する実施形態では、顧客単位のより細かいメッシュで検討するようにしている。

【0019】収益改善の計画ができれば、それによる収益改善額を把握する。これは最初の損益予測に対する増加分、即ち差額として把握する。

【0020】企業全体の損益管理は、最初の損益予測に基づく損益を利益計画として採用する。これが全社のモノサシとなる。しかし各ラインの目標は、収益改善の計画であり、各ラインはこれをクリアすることが求められる。そして目標を下回ったとしても、最悪でも損益予測の計画はクリアされなければならない（最低限のノルマ）という運用を行う。

【0021】このように本発明によれば、製品分類区分の増加や製造から販売までの経路の複雑化に拘わらず、製品の製造及び販売により得られる利益の予測に加え、該利益を拡大するための改善検討をも、より容易に行うことができる。

【0022】従って本発明によれば、スタッフ部門が客観的に損益をあてるということを意識して、全体感で損益予測作業を行うので、より短期間に、より精度のよい計画を策定することができる。またそうした損益の予測をノルマとして踏まえた上で、ライン部門がミクロの観点から改善策を検討し、目標設定を行うので、単なる予測に留まらず改善の意思と目標を含んだ、より効果の上がる計画策定及び実行を促すことができる。

#### 【0023】

【発明の実施の形態】以下、図を用いて本発明の実施の形態を詳細に説明する。

【0024】図1は、本発明が適用された実施形態の利益計画の策定方法の処理の流れを示す線図である。

【0025】本実施形態の利益計画の策定方法は、生産から販売までを行う製鉄会社を対象としており、製造お

よび販売を行う本実施形態の対象の製品は連続圧延帯板のコイルとなっている。このような製品は、自動車メーカーや電機メーカー等様々な業種へと出荷される。なお、本実施形態の利益計画の策定方法は、6ヶ月の半期単位でなされる。

【0026】この図1に示される如く、本実施形態の利益計画の策定方法は、営業部門Aにおいて販売計画20及び売上げ計画50が行われ、生産部門Bにおいて生産出荷計画30が行われ、会計部門Cにおいて収益計画40が行われる。又、収益改善計画60は主として生産部門Bにおいてなされるがこれに限定されるものではなく、必要に応じ営業部門Aや会計部門Cにおいてもなされる。

【0027】又、上述の生産出荷計画30は詳しくは、生産事前計画32、生産入庫計画34、生産在庫計画36及び生産出荷計画38で構成される。又、収益計画40は、費用計画42及び損益試算44にて構成される。又、生産部門Bは、工場等の実際に生産を行う製造部門に加え、生産管理部門を含む。

【0028】本実施形態の利益計画の策定方法ではまず、営業部門Aにおいて販売計画20がなされ、一方、これと並行して必要に応じ生産部門Bにおいて生産出荷計画30のうちの生産事前計画32がなされる。

【0029】まず販売計画20は、景気動向や市況要因に基づいて製品の販売量を予測することによってなされる。本実施形態の取扱う製品は連続圧延帯板であるが、その納入先の例えば自動車メーカーや電機メーカー等の市況に基づいてこの販売量は決定される。又、この販売量予測は、連続圧延帯板といった単位の比較的大まかなメッシュ（製品分類区分）で行うようにされている。ここで、このような販売量を実際の製品納入先からの情報を収集して行うことも考えられるが、しかしながら、この場合には情報収集に大きな労力と時間を要してしまうという問題がある。

【0030】一方、前述の生産事前計画32は、生産部門Bが備えている生産手段の生産能力を把握するというものであり、例えば連続圧延機による生産可能な量を試算するというものである。又、この生産事前計画32では、受注した製品の製造を工場や各製造機械にどのように配分するか決定するための予備情報を整えることもなされる。

【0031】次に、生産部門Bにおいて生産出荷計画30の生産入庫計画34では、販売計画20で求められた各製品の販売量に基づき、各製品をどの工場で生産するか、更には各工場でのどの生産手段、例えばどの連続圧延機で製造するか等の生産手段の配分を行う。このような生産手段の配分は、前述の生産事前計画32で得られた情報をも用いてなされる。この生産入庫計画34によって、販売計画20で予測された販売量の製品を生産部門Bで生産できることが検証され、又、各製品の製造行

程も概略定まる。

【0032】ここで、生産された製品は必ずしも直ちに出荷されるものではなく、納入先に直ちに引き取ってもらえるとは限らない。このため、生産在庫計画36では生産された製品がどのように在庫されるか、生産部門Bにおける製品の在庫量の計画を行う。又生産出荷計画38では、生産され在庫している製品がどのように出荷されるかの計画がなされる。この生産出荷計画38では過去の経験に基づき、主として納入先の事情によって決定されるもので生産側としては予測することが困難な出荷時期を予測することがなされる。

【0033】一方、前述のように生産入庫計画34において今期に販売する予定の製品の生産手段の割り当てがなされると、次に費用計画42において、製品の生産に要する費用を中心とし、製品の販売までに要する所要製品費用を予測する。この所要製品費用は、その製品を生産するのに用いる圧延機のチャージ費用や、その製品の生産に要した様々な消耗品の費用等が含まれる。この費用計画42は、会計部門Cにおいてなされる。

【0034】又、生産出荷計画30において生産された製品の出荷計画がなされると、続いて営業部門Aにおいて売上げ計画50がなされる。この売上げ計画50では、各製品の受注時の価格（製品単価等）に基づき、生産出荷計画38で予測された出荷される製品の売上げ価格を求める。又、このような売上げ価格から各月毎の売上高を予測する。出荷時期が同じで同一の製品でも、受注時期が異なると受注価格が異なり、出荷時の売上げ価格も異なる。この売上げ計画50では、このような受注時期により異なる受注価格をも考慮するようにしている。

【0035】費用計画42において製品の販売までに要する所要製品費用が予測され、且つ、売上げ計画50において売上高が予測されると、損益試算44は生産した製品を販売することによって得られる利益を予測する。この利益は基本的に、売上げ計画50で求められた売上高から、費用計画42で求められた所要製品費用を差し引いた額となる。この損益試算44で得られた利益予測は本実施形態の利益計画の策定方法の策定結果となる。更に、本実施形態では、この損益試算44で得られた利益予測、即ち策定結果に基づいて、収益改善計画60において製造から販売に至るまでの業務の改善検討を行う。この収益改善計画60では、このように予測された利益を更に拡大するために、生産部門Bを主とし、又必要に応じて営業部門Aや会計部門Cにおいてなされるべき改善点を見出すための検討がなされる。

【0036】以上説明した通り本実施形態によれば、まず損益予測機能を、営業部門Aによる販売計画20及び売上げ計画50と、生産部門Bによる生産出荷計画30と、会計部門Cによる収益計画40とによって実現することができる。又、このような損益予測機能によって利

益計画を行った後に、収益改善計画60によって収益改善機能を行っている。従って本実施形態によれば、これらの損益予測機能と収益改善機能とを共に実現することが可能となっている。

【0037】従って本実施形態によれば、製品分類区分の増加や製造から販売までの経路の複雑化に拘わらず、製品の製造及び販売により得られる利益の予測に加え、該利益を拡大するための改善検討をも、より容易に行うことができるという優れた効果を得ることができる。

【0038】又本実施形態では、損益予測機能ではより大まかなメッシュで利益計画を行っており、具体的には連続圧延帯板というより大まかな製品分類区分で利益計画を行っている。従って、このような利益計画を効率的に行うことができる。本実施形態においてつづいて収益改善計画60でなされる収益改善機能については、より細かいメッシュで改善計画がなされ、具体的には製品を納入する顧客単位のより細かな製品分類区分で改善計画がなされる。従って、各部門で行うべき改善内容をより具体的に検討することが可能となっている。

【0039】従って、本実施形態によれば、営業スタッフ部門が客観的に損益をあてる（予測する）ということ意識して、全体感で損益予測作業を行うので、より短期間に、より精度のよい計画を策定することができる。またそうした損益の予測をノルマとして踏まえた上で、ライン部門がミクロの観点から改善策を検討し、目標設定を行うので、単なる予測に留まらず、改善の意思と目標を含んだ、より効果の上がる計画策定及び実行を促すことができる。また全社の損益管理としては、損益の予

測を基準にするため、収益改善の計画が計画通り達成されれば、予測した損益以上の損益を実現することができる。

#### 【0040】

【発明の効果】以上説明した通り、本発明によれば、製品分類区分の増加や製造から販売までの経路の複雑化に拘わらず、製品の製造及び販売により得られる利益の予測に加え、該利益を拡大するための改善検討をも、より容易に行うことができるという優れた効果を得ることができる。

#### 【図面の簡単な説明】

【図1】本発明が適用された利益計画の策定方法の実施形態の処理の流れを示す線図

#### 【符号の説明】

- A…営業部門
- B…生産部門
- C…会計部門
- 20…販売計画
- 30…生産出荷計画
- 32…生産事前計画
- 34…生産入庫計画
- 36…生産在庫計画
- 38…生産出荷計画
- 40…収益計画
- 42…費用計画
- 44…損益試算
- 50…売上げ計画
- 60…収益改善計画

【図1】

